| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|----------|-------|---|---|---------------------|---------|------------------|
| L1 | 58547 | (wafer or semiconductor or substrate) near9 (dielectric or oxide or insulat\$4) and (metal near9 (dielectric or oxide or insulat\$4)) and ((opening or via or hole or trench or recess or aperture) near9 metal) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 07:43 |
| L2 | 917 | (wafer or semiconductor or substrate) near9 (dielectric or oxide or insulat\$4) and (metal near9 (dielectric or oxide or insulat\$4)) and ((opening or via or hole or trench or recess or aperture) near9 metal) and (stress near (relief or reliev\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 07:44 |
| L3 | 0 | (wafer or semiconductor or substrate) near9 (dielectric or oxide or insulat\$4) and (metal near9 (dielectric or oxide or insulat\$4)) and ((opening or via or hole or trench or recess or aperture) near9 metal) and (stress near (relief or reliev\$4)) and die and (scribe near lin) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 07:44 |
| L4 | 26 | (wafer or semiconductor or substrate) near9 (dielectric or oxide or insulat\$4) and (metal near9 (dielectric or oxide or insulat\$4)) and ((opening or via or hole or trench or recess or aperture) near9 metal) and (stress near (relief or reliev\$4)) and die and (scribe near line) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 08:37 |
| L6 | 5237 | (high near k) near (dielectric or oxide or insulat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 08:38 |
| L7 | 302 | (high near k) near (dielectric or oxide or insulat\$4) near9 (pit or recess or aperture or opening or via or hole or trench) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON . | 2007/04/24 08:41 |

| L8 | 69 | (high near k) near (dielectric or oxide or insulat\$4) near9 (pit or recess or aperture or opening or via or hole or trench) near9 (substrate or wafer or semiconductor or carrier) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 09:02 |
|-----------|-----|---|---|----|----|------------------|
| L9 | 10 | (high near k) near (dielectric or oxide or insulat\$4) near9 (pit or recess or aperture or opening or via or hole or trench) near9 (substrate or wafer or semiconductor or carrier) and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 09:06 |
| L10 | 42 | (high near k) near (dielectric or oxide or insulat\$4) near9 (pit or recess or aperture or opening or via or hole or trench) and (substrate or wafer or semiconductor or carrier) and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 09:10 |
| L11 | 42 | (pit or recess or aperture or opening or via or hole or trench) near9 ((high near k) near (dielectric or oxide or insulat\$4)) and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/24 09:11 |
| S1 | 861 | (wafer or semiconductor or substrate) and dielectric and (open or via or hole or trench) and scribe and die and (metal or conduct\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:02 |
| S2 | 872 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:02 |
| S3 | 414 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:02 |
| S4 | 336 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) and stress and plurality | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:02 |

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|-------|-----|--|---|----|----|------------------|
| S5 | 272 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) and stress and plurality and expos\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:03 |
| S6 | 206 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) and stress and plurality and expos\$3 and region | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:03 |
| S7 | 27 | (wafer or semiconductor or substrate) and dielectric and (opening or via or hole or trench) and scribe and die and (metal or conduct\$4) and stress and plurality and expos\$3 and region and pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:19 |
| S8 | 6 | die and "scribe line" and (wafer or semicondcutor or substrate) and dielectric and (opening or via or hole or trench) and (metal or conduct\$4) and pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 08:24 |
| S9 | 43 | (wafer or semicondcutor or substrate) and dielectric and (opening or via or hole or trench) and (metal or conduct\$4) and pit and "scribe line" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:02 |
| S10 | 6 | (wafer or semicondcutor or substrate) and dielectric and (opening or via or hole or trench) and (metal or conduct\$4) and pit and "scribe line" and die | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/08/04 12:59 |
| S11 · | 194 | ((wafer or semiconductor or substrate) near4 die) and (dielectric or oxide or insulat\$4) and (via or hole or trench) and (copper or tungsten) and (metal or polysilicon) and groove and photolithograph\$8 and etch | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:05 |
| S12 | 20 | ((wafer or semiconductor or substrate) near4 die) and (dielectric or oxide or insulat\$4) and (via or hole or trench or open\$3) and (copper or tungsten) and (metal or polysilicon) and groove and photolithograph\$8 and etch and (scribe near4 line) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:06 |

| | | | _ | | | |
|-----|-------|--|---|---------|----|------------------|
| S13 | 0 | ((wafer or semiconductor or substrate) near4 die) and (dielectric or oxide or insulat\$4) and (via or hole or trench or open\$3) and (copper or tungsten) and (metal or polysilicon) and groove and photolithograph\$8 and etch and (scribe near4 line) and pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR · | ON | 2006/05/10 14:13 |
| S14 | 27 | ((wafer or semiconductor or substrate) near4 die) and (dielectric or oxide or insulat\$4) and (via or hole or trench or open\$3) and (copper or tungsten) and (metal or polysilicon) and groove and photolithograph\$8 and etch and pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:15 |
| S15 | 15 | ((wafer or semiconductor or substrate) near4 die) and (dielectric or oxide or insulat\$4) and (via or hole or trench or open\$3) and (copper or tungsten) and (metal or polysilicon) and groove and photolithograph\$8 and etch and pit and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR · | ON | 2006/05/14 07:19 |
| S16 | 33326 | (stress near4 (wafer or semiconductor or substrate)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:17 |
| S17 | 787 | ((stress near4 (wafer or semiconductor or substrate)) near4 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/10 14:17 |
| S18 | 480 | (die near8 (wafer or semiconductor or substrate)) and (dielectric or oxide or insulat\$4) and (open\$3 or via or hole or trench or groove) and pit\$2 and (photolithographic\$4 or etch\$4) and plug and (metal or conduct\$4 or polysilicon) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/14 07:24 |
| S19 | . 70 | (die near8 (wafer or semiconductor or substrate)) and (dielectric or oxide or insulat\$4) and (open\$3 or via or hole or trench or groove) and pit\$2 and (photolithographic\$4 or etch\$4) and plug and (metal or conduct\$4 or polysilicon) and (scribe near line) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/05/14 07:25 |

| S20 | 63 | (die near8 (wafer or semiconductor or substrate)) and (dielectric or oxide or insulat\$4) and (open\$3 or via or hole or trench or groove) and pit\$2 and (photolithographic\$4 or etch\$4) and plug and (metal or conduct\$4 or polysilicon) and (scribe near line) and (tungsten or copper) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 12:22 |
|-----|--------|--|---|----|----|------------------|
| S21 | 21542 | (die near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 12:23 |
| S22 | 197081 | ((die or circuit) near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 12:24 |
| S23 | 733 | ((die or circuit) near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) and (scribe near9 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 12:24 |
| S24 | 30 | ((die or circuit) near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) and (scribe near9 die) and ((metal or(dielectric or oxide or insulat\$4)) near9 (pit or recess)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 12:26 |
| S25 | 12 | ((die or circuit) near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) and (scribe near9 die) and ((metal or(dielectric or oxide or insulat\$4)) near9 (pit or recess)) and ((opening or via or hole or trench) near9 (dielectric or oxide or insulat\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:15 |

| S26 | 3 | ((die or circuit) near9 (wafer or semiconductor or substrate)) and ((insulat\$4 or oxide or dielectric) near9 (wafer or semiconductor or substrate)) and (scribe near9 die) and ((metal or(dielectric or oxide or insulat\$4)) near9 (pit or recess)) and ((opening or via or hole or trench) near9 (dielectric or oxide or insulat\$4)) and stress | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 13:23 |
|-----|-------|---|---|----|----|------------------|
| S27 | 19949 | stress near4 (dielectric or oxide or insulat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 13:24 |
| S28 | 162 | (stress near4 (dielectric or oxide or insulat\$4)) near9 fill | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 13:25 |
| S29 | 85 | (stress near4 (dielectric or oxide or insulat\$4)) near9 fill near9 (via or hole or trench or opening) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 13:25 |
| S30 | 12 | (stress near4 (dielectric or oxide or insulat\$4)) near9 fill near9 (via or hole or trench or opening) near9 (substrate or semiconductor or wafer) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/21 13:26 |
| S31 | 58483 | (stress near9 (wafer or semiconductor or substrate)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:38 |
| S32 | 29190 | (stress near9 (wafer or semiconductor or substrate or carrier)) and ((dielectric or oxide or insulat\$4) near9 (wafer or semiconductor or substrate or carrier)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:40 |

| S33 | 33790 | (High near stress) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:40 |
|-----|-------|--|---|------|----|------------------|
| S34 | 451 | (High near stress) near4 (dielectric or oxide or insulat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:41 |
| S35 | 54 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (substrate or wafer or carrier or semiconductor) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:09 |
| S36 | 0 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (substrate or wafer or carrier or semiconductor) and (scribe near4 line) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:42 |
| S37 | 0 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (substrate or wafer or carrier or semiconductor) and (scribe near9 line) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 11:42 |
| S38 | 4 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (substrate or wafer or carrier or semiconductor) and pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:08 |
| S39 | 3 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (substrate or wafer or carrier or semiconductor) near9 (recess or pit or aperture or hole or via or trench) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2007/04/19 12:15 |
| S40 | 19 | (High near stress) near4 (dielectric or oxide or insulat\$4) near9 (recess or pit or aperture or hole or via or trench) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:32 |

| S41 | 17 | "high stress dielectric" | US-PGPUB; USPAT; | OR | ON | 2007/04/19 12:33 |
|-----|------|--|---|----|----|------------------|
| | | · | USOCR; EPO; JPO; DERWENT; IBM_TDB | | | |
| S42 | 0 | (pit or hole or recess or via or opening or aperture) near9 "high stress dielectric" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:34 |
| S43 | 0 | (pit or hole or recess or via or opening or aperture or trench) near9 "high stress dielectric" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:35 |
| S44 | 5221 | (high near k) near (dielectric or oxide or insulat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:36 |
| S45 | 302 | (high near k) near (dielectric or oxide or insulat\$4) near9 (via or hole or recess or aperture or trench or opening) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:37 |
| S46 | 302 | (high near k) near (dielectric or oxide or insulat\$4) near9 (via or hole or recess or aperture or trench or opening or pit) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:37 |
| S47 | 0 | (high near k) near (dielectric or oxide or insulat\$4) near9 pit | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:37 |
| S48 | 9 | (high near k) near (dielectric or oxide or insulat\$4) near9 (via or hole or recess or aperture or trench or opening or pit) and (stress near9 relie\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:38 |

| S49 | 9 | (high near k) near (dielectric or oxide or insulat\$4) near9 (via or hole or recess or aperture or trench or opening or pit) and (stress near9 (relief or reliev\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 12:48 |
|-----|------|--|---|----|----|------------------|
| S50 | 18 | (high near k) near (dielectric or oxide or insulat\$4) near9 (via or hole or recess or aperture or trench or opening or pit) and (stress near9 (wafer or substrate or semiconductor carrier)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:01 |
| S51 | . 98 | (high near stress) near (dielectric or oxide or insulat\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:03 |
| S52 | 2 | (high near stress) near (dielectric or oxide or insulat\$4) near9 (pit or trench or hole or aperture or recess or opening) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:04 |
| S53 | 42 | (stress near (relief or reliev\$4)) and (semiconductor or substrate or wafer or carrier) near9 (dielectric or oxide or insulat\$4) and die and (scribe near line) and (metal near9 (dielectric or oxide or film)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:18 |
| S54 | 24 | (stress near (relief or reliev\$4)) and (semiconductor or substrate or wafer or carrier) near9 (dielectric or oxide or insulat\$4) and die and (scribe near line) and (metal near9 (dielectric or oxide or film)) and ((opening or hole or aperture or recess or via or trench) near9 metal) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/19 13:19 |